



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/625,000

07/22/2003

Gary William Flake

600189-148

8179

76041

7590

08/08/2008

YAHOO! INC.

C/O DREIER LLP

499 PARK AVENUE

NEW YORK, NY 10022

EXAMINER

KARDOS, NEIL R

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

08/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/625,000	Applicant(s) FLAKE ET AL.	
	Examiner Neil R. Kardos	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a **NON-FINAL** Office action on the merits in response to communications filed July 7, 2008. Claims 1 and 13 have been amended. Currently, claims 1-14 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 7, 2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1: First, claim 1 is directed toward the statutory category of a process. In order for a claimed process to be patentable subject matter under 35 U.S.C. § 101, it must either: (1) be

Art Unit: 3623

tied to another statutory class (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *See Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method/process is not patentable subject matter under § 101. Thus, to qualify as a statutory process under § 101, the claim should positively recite the other statutory class to which it is tied (e.g. by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g. by identifying the material that is being changed to a different state).

Here, claim 1 does not transform underlying subject matter to a different state or thing because it merely operates on data associated with a concept to determine a value for the concept. Claim 1 is also not tied to another statutory class. Although the claim recites a “computerized system” in two instances, both of these recitations are nominal. The first instance is recited in the preamble, and the second instance recites that a value is “used” in the computerized system,” but does not say how it is used. These nominal recitations are not sufficient to tie the process of claim 1 to another statutory class. Thus, the claim does not qualify as a statutory process under § 101.

Second, claim 1 contains abstract ideas such as operating on data to produce a statistic and determining a value for a concept; therefore, the claim falls within a 35 U.S.C. 101 judicial exception. A claimed invention falling within a judicial exception may be statutory if it has a practical application; that is, if it produces (1) a physical transformation or (2) a useful, concrete, and tangible final result. *See AT&T v. Excel Communications Inc.*, 172 F.3d at 1358, 50 USPQ

2d at 1452; *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d at 1373, 47 USPQ 2d at 1601 (Fed. Cir. 1998).

As discussed above, the claimed invention does not transform an article or physical object to a different state. Therefore, the test for practical application as applied by the examiner involves determining whether the claimed invention produces a useful, concrete, and tangible final result. Utility may be evidenced by a specific (particular to a subject matter), substantial (real-world), and credible (logical) final result. Concreteness may be evidenced by repeatability with substantially the same result. Tangibility may be evidenced by a non-abstract real-world result.

Claim 1 lacks a useful final result. The claimed invention is not specific because it is not particular to some subject matter. The final result of the method is a value of a concept. Although the claim recites possible uses for the value (e.g. in a computerized system and to determine the value of an instrument), these uses are not positively recited so as to make the claimed invention particular to some subject matter (e.g. finance). Furthermore, the claimed invention is not substantial because the result is not a "real-world" result. A concept value is so abstract that it is not clear how it would be practically applied in the real world.

Claim 1 also lacks a tangible final result for the same reasons that it does not produce a substantial result (see previous paragraph).

Because the claimed invention does not produce a useful or tangible final result, it is not statutory subject matter under § 101.

Third, claim 1 preempts an abstract idea. An Applicant may not patent every "substantial practical application" of an abstract idea, law of nature, or natural phenomena because such a

Art Unit: 3623

patent would “in practical effect be a patent on the [abstract idea, law of nature, or natural phenomena] itself.” *Gottschalk v. Benson*, 409 U.S. 63, 71-72, 175 USPQ 673, 676 (1972). In the current case, claim 1 recites a method that operates on data to produce a statistic that is used to determine a value for a concept, which is an abstract idea. The claim does not recite a specific practical application for the method. Although the claim recites possible uses for the value (e.g. in a computerized system and to determine the value of an instrument), these uses are not positively recited so as to make the claimed invention particular to a practical application. Rather, the claim covers any application in which an operation is performed on data to produce a quantitative statistic used to determine a value for a concept. Thus, the claim is directed to the abstraction itself, which is not patentable subject matter under § 101.

Claim 13: Claim 13 is substantially similar to claim 1 and is rejected under similar rationale.

Claims 2-12 and 14: The dependent claims are rejected for failing to remedy the deficiencies of the claims from which they depend.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner (US 2003/0105677) in view of Chan, “Experimental Markets for Product Concepts.”

Claim 1: Skinner discloses in a computerized system for allowing transactions in instruments, the instruments being capable of being valued based on values of term-based concepts, and terms of the concepts being useable in computerized searches, a method for valuing a concept comprising a set of one or more terms, the method comprising:

- obtaining quantitative data associated with at least one of the concept and one or more of the terms of the term set (see paragraph 38 and paragraph 12: lines 1-9, disclosing tracking search terms to determine effectiveness based on a number of impressions, number of clicks, and number of sales);
- operating on the data to produce a quantitative statistic (see id., disclosing, inter alia, analyzing the data as well as collecting it); and
- determining a value of the concept based at least in part on the produced statistic such that the value is used in the computerized system allowing transactions in the instruments (see id., disclosing determining the search terms effectiveness to advertising and marketing; paragraphs 12 and 37, disclosing using the value in a computer).

Skinner does not explicitly disclose wherein the value of the concept is used to determine the value of one or more of the instruments.

Chan teaches this limitation (see pages 1-2). Chan discloses virtual stock markets that trade virtual securities, the securities being associated with a concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the virtual stock market of Chan to value the concepts of Skinner. This combination of known elements retains the functionality of the separate elements and produces a result that would be predictable to one of ordinary skill in the art.

Claim 2: Skinner discloses obtaining quantitative data associated with at least one of demand for the concept and demand for one or more of the terms of the term set (see paragraphs 12 and 37-38, disclosing obtaining demand based on impressions, clicks, and sales; paragraph 48, disclosing obtaining competitor demand information).

Claim 3: Skinner discloses obtaining quantitative data associated with at least one of demand for the concept for use in advertising and demand for one or more of the terms of the term set for use in advertising (see paragraphs 12 and 38, disclosing obtaining data related to advertising and marketing).

Claim 4: Skinner discloses measuring the demand for use in advertising based on one or more amounts paid for use in advertising (see paragraph 48, disclosing obtaining competitor bid information).

Claim 5: Skinner discloses measuring the demand for use in advertising based on one or more amounts paid for use in advertising, wherein the use in advertising comprises obtaining one

Art Unit: 3623

or more rights to have an advertisement included in results from one or more computerized searches using at least one of the terms of the term set (see id.).

Claim 6: Skinner discloses operating on the data by using the data in at least one mathematical formula (see paragraphs 44-45; paragraphs 50-60).

Claim 7: Skinner discloses collecting quantitative data relating to one or more Pay-Per-Click auctions (see paragraphs 5, 8, 20, and 39).

Claim 8: Skinner discloses operating on the data by using at least one of a total revenue per period calculation, a median revenue per period calculation, an average revenue per period calculation, an average of median bidded price calculation, and a median of median clicked price calculation, and a median click calculation (see paragraph 38, disclosing determining impressions, clicks, and sales per period; paragraph 41: lines 4-10, disclosing recording the amount of purchase; paragraph 44: lined 11-15, disclosing calculations with the amount of sales; paragraph 53, disclosing profits).

Claim 9: Skinner discloses taking at least one measure to prevent intentional manipulation of the value of the concept (see paragraph 44, disclosing requiring a minimum threshold of actions to ensure accurate data; paragraph 37: lines 11-12, disclosing removing duplicate data).

Art Unit: 3623

Claim 10: Skinner discloses taking at least one measure to maintain liquidity (see paragraphs 16 and 21, disclosing eliminating bid gaps and preventing overbidding, which serve to maintain liquidity in an advertiser's account).

Claim 11: Skinner does not explicitly disclose operating on the data by using a median click calculation, and comprising omitting from the median click calculation one or more highest and lowest price quantities.

However, Skinner teaches determining a number of clicks per time period (see paragraph 38) and using that to determine a reasonable estimate of the expected clicks for a future time period (see paragraph 43: lines 10-11).

Examiner takes Official Notice that it is well known in the statistical arts to average a set of data, including using a median value, over past time periods in order to determine an expectation for future time periods. Furthermore, Examiner takes Official Notice that it is well known in the statistical arts to omit outliers of highest and lowest values from a median calculation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known statistical methods in conjunction with the click data disclosed by Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of a more accurate prediction.

Claim 12: Skinner does not explicitly disclose omitting from the median click calculation the same number of highest price quantities as lowest price quantities.

Examiner takes Official Notice that it is well known in the statistical arts to eliminate an equal number of outliers from a median calculation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known statistical methods in conjunction with the click data disclosed by Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of a more accurate prediction.

Claim 13: Skinner discloses in a computerized system for allowing transactions in instruments, the instruments being capable of being valued based on values of term-based concepts, and terms of the concepts being useable in computerized searches, a method for valuing a concept comprising a set of one or more terms, the method comprising:

- obtaining quantitative data associated with at least one of demand for the concept and demand for one or more of the terms of the term set (see paragraph 38 and paragraph 12: lines 1-9, disclosing tracking search terms to determine effectiveness based on a number of impressions, number of clicks, and number of sales);
- operating on the data to produce a quantitative statistic (see id., disclosing, inter alia, analyzing the data as well as collecting it); and
- determining a value of the concept based at least in part on the produced statistic (see id., disclosing determining the search terms effectiveness to advertising and marketing; paragraphs 12 and 37, disclosing using the value in a computer),

Art Unit: 3623

- comprising taking at least one measure to prevent intentional manipulation of the value of the concept (see paragraph 44, disclosing requiring a minimum threshold of actions to ensure accurate data; paragraph 37: lines 11-12, disclosing removing duplicate data).

Skinner does not explicitly disclose wherein the value of the concept is used to determine the value of one or more of the instruments.

Chan teaches this limitation (see pages 1-2). Chan discloses virtual stock markets that trade virtual securities, the securities being associated with a concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the virtual stock market of Chan to value the concepts of Skinner. This combination of known elements retains the functionality of the separate elements and produces a result that would be predictable to one of ordinary skill in the art.

Claim 14: Skinner does not explicitly disclose using a median click calculation in determining the statistic, and comprising omitting from the median click calculation one or more highest and lowest price quantities.

However, Skinner teaches determining a number of clicks per time period (see paragraph 38) and using that to determine a reasonable estimate of the expected clicks for a future time period (see paragraph 43: lines 10-11).

Examiner takes Official Notice that it is well known in the statistical arts to average a set of data, including using a median value, over past time periods in order to determine an expectation for future time periods. Furthermore, Examiner takes Official Notice that it is well

Art Unit: 3623

known in the statistical arts to omit outliers of highest and lowest values from a median calculation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known statistical methods in conjunction with the click data disclosed by Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of a more accurate prediction.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 2004/0148222 to Sabella et al, directed to a method and system for online advertising
- US 2004/0167845 to Corn et al, directed to determining a minimum price per click for a term in an internet auction
- US 6,269,361 to Davis et al, directed to influencing a position on a search result list generated by a computer network
- US 2003/0212648 to Cunningham et al, directed to influencing a position on a search result list

Art Unit: 3623

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos
Examiner
Art Unit 3623

NRK
7/31/08
/Jonathan G. Sterrett/
Primary Examiner, Art Unit 3623